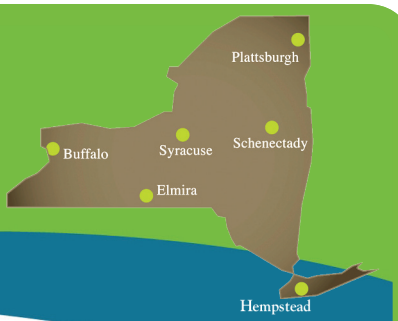
ENERGY CONSERVATION IN HISTORIC BUILDINGS

ELMIRA, NY • AUGUST 18TH AND 19TH

Corning Community College, Academic and Workforce Development Center
318 Madison Avenue /Elmira, NY 14901



Preservation League of New York State

ENERGY CONSERVATION IN HISTORIC BUILDINGS WORKSHOPS are designed for contractors, architects and other building professionals. Presented by the Preservation League of New York State as part of the NYSERDA Energy Code Initiative, these workshops focus on energy conservation issues of interest to those who work in older buildings, but who do not specialize in historic preservation or historic structures. For example, a contractor hired to insulate a 1920s residence or an architect who wants to understand the application of air sealants for a mixed-use building rehabilitation would come away with information that would help them better serve their clients. Participants will receive technical information on the Energy Conservation Construction Code of New York State - 2010 (ECCCNYS-2010) and its applications for historic buildings in both classroom and field presentations.

Supported by: nyserda Energy. Innovation. Solutions.

ABOUT THE NYSERDA ENERGY CODE INITIATIVE

New York State is committed to ensuring that at least 90% of residential and commercial buildings comply with the Energy Conservation Construction Code of New York State – 2010 (ECCC-NYS-2010). NYSERDA's Energy Code Training and Support Initiative will support the design and construction communities in this transition to a more energy efficient built environment.

To meet this goal and the requirements of the ECCCNYS-2010, NYSERDA and partners will:

- Present more than 500 in-person training seminars to be delivered statewide through June 2012 on unique, energy code-related topics
- Develop on-line training courses based on these seminars
- Provide professional certification to individuals through the International Code Council
- Provide one-on-one training and support to code officials and design professionals
- Provide tailored information sessions to municipalities on the ECCC-NYS-2010 and above-code compliance
- Disseminate written guides for code users and field installers.

Go to www.nyserdacodetraining.com for information on the Energy Code and Support Training Initiative. Efforts are supported by The American Recovery and Reinvestment Act of 2009. As a public benefit corporation, NYSERDA has been developing partnerships to advance innovative energy solutions in New York since 1975.

Continuing Education credits for Architects: 6 LUs/HSW for each full-day of the two-day workshop, totaling 12 LUs/HSW for the two days. (AIA members will also receive SD credits)

workshop agenda

DAY ONE

8:00	Check-in / Coffee
8:30	Opening Remarks
8:45	Lecture 1 - Workshop Goals and Preservation Overview presented by Tania G. Werbizky
9:15	Lecture 2 - "Slow Food in the Fast Lane" presented by Walter Sedovic and Jill Gotthelf
10:30	Break
10:45	Lecture 3 – "Historic Renovation and the New York State Energy Code" presented by John Barrows
12:00	Lunch
12:45	Lecture 4 – "Sealants: An Insider's Guide" presented by Kyle Normandin
2:00	Break
2:15	Demonstration Session 1 - "Saving Historic Windows with Energy Efficiency" presented by Steve Jordan

DAY TWO

8:30	Check-in / Coffee
9:00	Welcome and Workshop Goals, Prior Day's Review
9:15	Lecture 5 – "HVAC: Ductwork, and Boilers, and Geothermal! Oh my!" presented by Peter Ottavio
10:30	Break
10:45	Lecture 6 – "Manage the Moisture and the Budget: The DOs and DON'Ts of Insulation" presented by Mark Thaler
12:00	Lunch
12:45	Lecture 7 – "The Gerard Building" presented by Elise Johnson-Schmidt
1:15	Field Session 1 - "Tools of Analysis" presented by Peter Ottavio and Mark Thaler
	Field Session 2 - "Whole House Analysis: Incorporating Traditional Building Technologies with Energy Conservation Principles" presented by Walter Sedovic and Jill Gotthelf

Workshop Fee:
$75 for both days with lunch included

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REGISTER: nyserdacodetraining.com, and at our website: www.preservenys.org/energyworkshops

NYSERDA ENERGY CODE TRAINING

ENERGY CONSERVATION IN HISTORIC BUILDINGS

COURSE DESCRIPTIONS

LECTURE 1 "PRESERVATION OVERVIEW"
This module will outline the objectives for the entire workshop as well as give a brief introduction to preservation principles. The differences between national, state and local preservation designations will be discussed.

LECTURE 2 "SLOW FOOD IN THE FAST LANE"
Older buildings have inherent properties that can make them more energy efficient than their new construction counterparts. This lecture will introduce the unique features that make existing/historic buildings candidates for lower energy consumption. These buildings were designed as a whole, every component meant to work in concert with the other. In order to diagnose energy solutions, one must analyze the building in its entirety. New technologies (thermographic cameras, computer energy modeling, etc.) can give us greater insight into the building's energy expenditure. This lecture will briefly hit upon funding sources for energy upgrades and preservation policy that affects renovations.

LECTURE 3 "HISTORIC RENOVATION AND THE ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE – 2010 (ECCCNYS - 2010)"
When updating and upgrading existing properties it is important to know how to "make code." When does the ECCCNYS - 2010 come into play for these properties? This lecture will provide a brief overview of the ECCCNYS - 2010. Greater attention will be paid to portions of the ECCCNYS - 2010 that affect historic/existing properties. Although National and State Register properties are exempt from the ECCCNYS - 2010, this is not the case for all existing properties.

LECTURE 4 "SEALANTS: AN INSIDER'S GUIDE"
Sealants are an important part of increasing a building's energy efficiency. Sealing the gaps between building components, especially when different materials come together, requires careful consideration of multiple factors including the interaction among the materials, long-term durability and ease of maintenance.

LECTURE 5 "HVAC: DUCTWORK, AND BOILERS, AND GEOTHERMAL! OH MY!"
Changing or re-commissioning a boiler may be the best use of funds in a home renovation. This lecture will address how to improve the effectiveness of a building's current heating system and when to install a new system. When a building's function changes, when occupancy load is altered or when the building envelope is made tighter the needs of its heating and cooling system must be reassessed. New technologies that address the issue of where to place the HVAC will also be discussed.

LECTURE 6 "MANAGE THE MOISTURE AND THE BUDGET: THE DOs AND DON'Ts OF INSULATION"
Many historic structures were built without insulation. Current construction practice insulates many parts of the building. So when is it appropriate and cost efficient to insulate an existing structure? Where is insulation most effective? What type of insulation is best used for these applications? And what are the pitfalls to watch out for when adding insulation to cavities previously without? This lecture will present the various issues associated with different types of insulation as well as the best approach to avoiding these hazards. Information will be presented in a manner to highlight the most cost efficient approaches.

DEMONSTRATION SESSION 1 "SAVING HISTORIC WINDOWS WITH ENERGY EFFICIENCY"
This demonstration session will give an introduction to the components of the window as well as the issues and advantages associated with retaining and keeping historic windows. Comparisons will be made between historic and modern windows and strategies for improving efficiency of historic windows. Life cycle costs and day lighting will be briefly discussed.

FIELD SESSION 1 "TOOLS OF ANALYSIS"
Computer programs and field apparatuses can be useful diagnostic tools for existing buildings. Computer programs can help with energy calculations. Other tools are used on-site to locate air leakage. Participants will be able to see these tools up close and learn how to read the data output.

FIELD SESSION 2 "WHOLE HOUSE ANALYSIS"
From the basement to the attic, a preservation architect will lead a tour analyzing components of the historic building. Concepts and ideas presented in earlier lectures will be put to practice, as the tour guide assesses the areas of common energy expenditure. Approaches to increase energy efficiency will be discussed in detail.

FIELD SESSION LOCATION:
The Gerard Building
414 Carroll Street
Elmira, NY 14901

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